



North South University
Department of Electrical and Computer Engineering

Senior Design Project
Advanced Offline Location Based Safety Application

Conducted By

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Declaration

We, hereby declare that no part of this project was previously submitted to anywhere for the fulfillment of any project or degree. This project is the outcome of 8 months of hard work performed under the supervision of our faculty advisor Tanjila Farah, Department of Electrical and Computer Engineering, North South University. We pledge that there is no similarity with this work and any other work we know of.

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Approval

The Senior Design Project., entitled “Safe Me: A Women Safety App” by Ishtiak Ahmed (ID: 1530494042), Samiha Ferdous (ID: 1620834042) and Anika Tamanna Riya (ID: 1610801043), students of Department of Electrical and Computer Engineering, North South University has been accepted as satisfactory and approved for partial fulfillment of the requirement of the degree of Bachelors of Science in Computer Science Engineering and Electrical and Electronic Engineering in Summer 2020.

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Abstract

Safety is one of the burning issues in the world we live in today. Violence against women has become a global phenomenon and it prevails beyond cultural, social, geographical, and economic context. Like Bangladesh almost all the constitutions of the world guarantee equal right for both men and women but it is also true that not many steps have been taken to reduce the violence and harassment that one in every three women face in their day-to-day lives. Sexual harassment and other forms of violence have become an everyday occurrence around the world. The violence that women face not only takes place outside of the home. These violent acts can occur within the walls of their homes by both partner and non-partner members.

Violence does not always have to be a physical force. It can be mental, emotional, and psychological as well. Violence can be in the form of a threat or any physical force that can cause harm to a person's life or reputation. Violence against women can be categorized as criminal violence, such as rape, abduction, murder. Social violence includes dowry tortures, death, violence against pregnant women in demand of a male child, violence against widows or elderly women. social violence includes honor killing, eve-teasing, female feticides, etc. This violence is not confined within the rural areas where there are illiterate people. It is seen that violence occurs in the educated society as well. Women all over the world whether they belong to an illiterate or educated society are not considered safe.

The abuse that these women face in their lives is often accepted by them. They often feel frightened even by the idea of seeking help. In most cases these women never let people know about the ongoing violence in their lives.

Most of the time, it is not possible for the victims to seek immediate help in the time of danger. Sometimes rescue takes a lot of time to arrive at the location. Various initiatives have been taken to reduce or eradicate these violent acts against women and children. Laws have been passed to punish the criminals involved in these types of crimes. But these crimes are still prevalent and sadly also increasing at an alarming rate.

To solve this problem, we have developed a safety application that can help women in the time of danger. Seeking immediate help has become a one-step process with this application. The application has to be installed on smartphones. The application includes a distress button that enables the person in danger to ask for help from the emergency contacts set beforehand. The emergency contact receives a location beforehand via SMS even without having any internet connection available. The location link sent can provide the location in Google map and let them know about the exact location.

In this way, women can always have an assurance that the help is one step away and they can always seek help at the time of need. Being in a dangerous situation people often tend to freeze in the situation and asking for help step by step often becomes difficult. But this app does not only make the steps easier but also makes it more efficient and cost-friendly.